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State Superintendent
of Public Instruction

Mathematics Framework and Acceleration to Higher Mathematics

The SBE Guidelines state: include a “discussion of options for middle school acceleration to support Algebra I or Integrated Mathematics I prior to ninth grade that are consistent with other Common Core states.”

Acceleration decision points at middle school—between sixth and seventh grade—and in high school, after grade eight

- Acceleration in middle school
- Doubling up, enhanced pathway, or summer bridge in high school

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Appendix A: Course Placement and Sequences for Higher Mathematics

The CA CCSSM represent a tight progression of skills and knowledge that is inherently rigorous and designed to provide a strong foundation for success in the new, more advanced, **Algebra I and Mathematics I courses that will typically be taken by most students in the ninth grade.**

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Appendix A: Course Placement and Sequences for Higher Mathematics

Students Who NOT May Be Ready for Acceleration

Misplacement is common, with negative **consequences** for students when they are unable to keep pace with the incremental difficulty of mathematics content; students' weaknesses in key foundational areas that support algebra-readiness frequently translate into **substantial difficulty reaching proficiency** in higher-level mathematics while **in high school** (Finkelstein, et al., 2012).

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Appendix A: Course Placement and Sequences for Higher Mathematics

Students Who May Be Ready for Acceleration

…there will still be some students who are able to move through the mathematics quickly. These students may choose to take an **accelerated or enhanced mathematics program beginning in eighth grade (or even earlier)** so they can take college-level mathematics in high school.

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Students who are capable of moving more quickly deserve thoughtful attention, both to ensure that they are **challenged** and that they are mastering the full range of mathematical content and skills—**without omitting critical concepts and topics**.

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…maintaining motivation and engagement in advanced mathematics is essential for some students who enjoy their work in mathematics and excel in mathematics, and in school, as a result. **Slowing down instruction or restricting access to accelerated sequences may discourage and disengage some students** from their progress in math, and potentially other courses as well.

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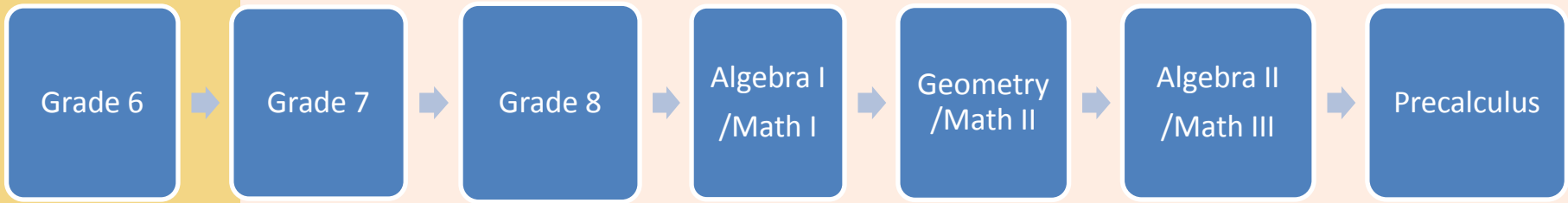
Course Sequences for Higher Mathematics: No Acceleration



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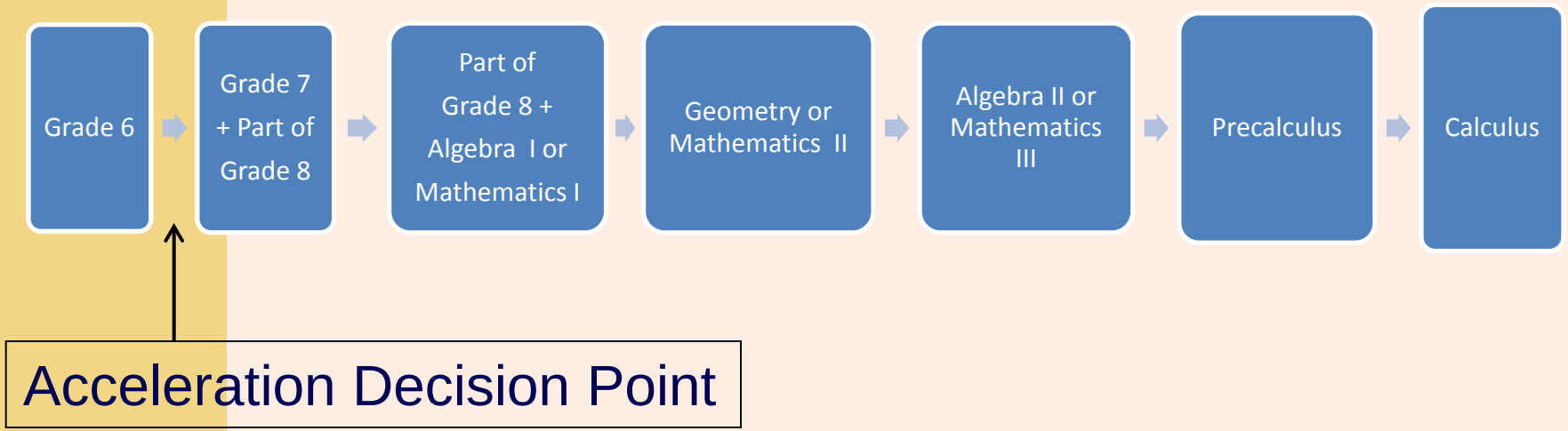
Course Sequences for Higher Mathematics: Middle School Acceleration



Course Sequences for Higher Mathematics: Doubling Up

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Doubling up in High School

Grade 6 → Grade 7 → Grade 8 → Algebra I → Algebra II → Precalculus → Calculus

Geometry

Acceleration Decision Point

Accelerated Integrated Pathway

Grade 6 → Grade 7 → Grade 8 → Mathematics I and part of Mathematics II → Part of Mathematics II and Mathematics III → Precalculus → Calculus

Course Sequences for Higher Mathematics: Enhanced & Summer Bridge

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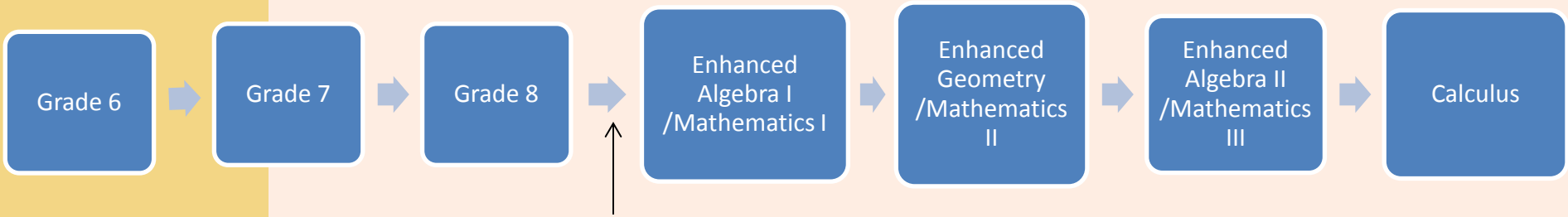
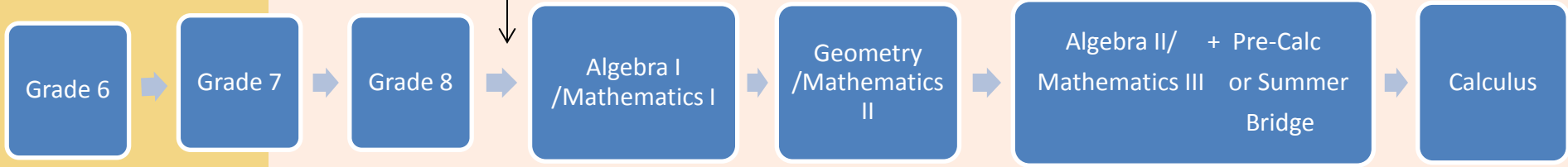
Enhanced Pathway



Acceleration Decision Point

Summer Bridge Pathway



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View the new *Mathematics Framework* online at

http://www.cde.ca.gov/ci/ma/cf/